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(71) 出願人 597047451

株式会社エーディーエム

東京都中野区新井2丁目10番9号

(72) 発明者 仁科 浩明

東京都中野区新井2丁目10番9号 株式会

社エーディーエム内

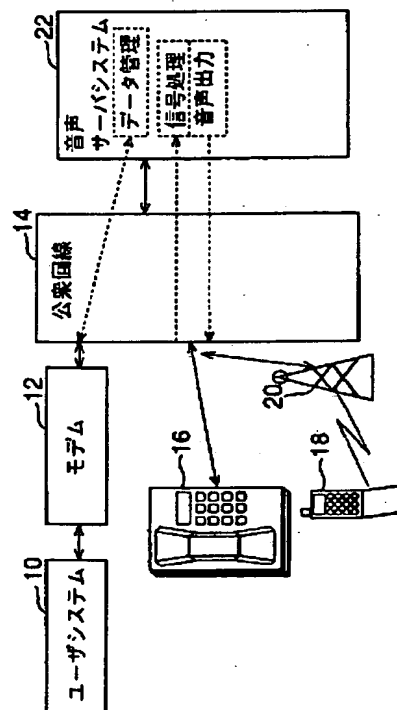
(74) 代理人 弁理士 伊東 忠彦

(54) 【発明の名称】 インタラクティブシステム

(57) 【要約】

【課題】 従来のゲーム機はパーソナルコンピュータではテレビジョン受像機やディスプレイに表示される画像と、スピーカから流れる音声とで楽しんでいるだけである。

【解決手段】 記憶媒体からプログラムを読み出して実行するユーザシステムと、予め格納されている音声を供給する音声サーバスシステムと、ユーザシステムの近傍にある電話機又は携帯電話機とを有し、ユーザシステムのプログラムの実行により公衆回線を通して音声サーバスシステムに音声出力要求を出して、音声サーバスシステムから電話機又は携帯電話機に回線接続して音声を供給する。このため、プログラムの進行に応じてユーザの近くの電話機又は携帯電話機からプログラムに関する内容の音声の流れ出て、ユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができる。



**【特許請求の範囲】**

**【請求項1】** 公衆回線に接続されており、記憶媒体からプログラムを読み出して実行するユーザシステムと、公衆回線に接続されており、予め格納されている音声を提供する音声サーバシステムと、

前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、

前記ユーザシステムのプログラムの実行により公衆回線を通して音声サーバシステムに音声出力要求を出し、前記音声サーバシステムから前記電話機又は携帯電話機に回線接続して音声を提供することを特徴とするインタラクティブシステム。

**【請求項2】** 記憶媒体からプログラムを読み出して実行するユーザシステムと、

公衆回線に接続されており、予め格納されている音声を提供する音声サーバシステムと、

前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、

前記ユーザシステムのプログラムの実行によって与えられるヒントによりユーザが前記電話機又は携帯電話機から音声サーバシステムに回線接続し、前記音声サーバシステムから前記電話機又は携帯電話機に音声を提供することを特徴とするインタラクティブシステム。

**【請求項3】** 記憶媒体からプログラムを読み出して実行するユーザシステムと、

前記ユーザシステムを公衆回線に接続するアダプタと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し

前記ユーザシステムのプログラムの実行によって前記記憶媒体に予め格納されている音声を読み出して前記ユーザシステムから公衆回線を通して前記電話機又は携帯電話機に供給することを特徴とするインタラクティブシステム。

**【請求項4】** 記憶媒体からプログラムを読み出して実行するユーザシステムと、

前記ユーザシステムの近傍にある携帯電話機と、

前記ユーザシステムを前記携帯電話機と接続するアダプタとを有し、

前記ユーザプログラムの実行によって前記記憶媒体に予め格納されている音声を読み出して前記ユーザシステムからアダプタを通して前記携帯電話機に供給することを特徴とするインタラクティブシステム。

**【発明の詳細な説明】****【0001】**

**【発明の属する技術分野】** 本発明はインタラクティブシステムに関し、電話等の通信設備を利用したインタラクティブシステムに関する。

**【0002】**

**【従来の技術】** 従来より、CD-ROM（コンパクト・ディスク・リード・オンリー・メモリ）等の記憶媒体に

記憶されたソフトウェアを実行し、ユーザの入力操作に応じて画像表示及び音声出力を行い、ゲーム機又はパーソナルコンピュータでゲームを楽しむことが行われている。また、従来からパソコン通信サービスを用いて、遠隔地の複数の端末（パーソナルコンピュータ）でゲームを実行することも行われている。

**【0003】**

**【発明が解決しようとする課題】** 従来のゲーム機はパーソナルコンピュータではテレビジョン受像機やディスプレイに表示される画像と、スピーカから流れる音声とで楽しんでおり、これに電話機や携帯電話機を接続してコミュニケーションを図るという思想はなかった。本発明は上記の点に鑑みなれたもので、電話又は携帯電話を用いてユーザとのコミュニケーションを図るインタラクティブシステムを提供することを目的とする。

**【0004】**

**【課題を解決するための手段】** 請求項1に記載の発明は、公衆回線に接続されており、記憶媒体からプログラムを読み出して実行するユーザシステムと、公衆回線に接続されており、予め格納されている音声を提供する音声サーバシステムと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、前記ユーザシステムのプログラムの実行により公衆回線を通して音声サーバシステムに音声出力要求を出し、前記音声サーバシステムから前記電話機又は携帯電話機に回線接続して音声を提供する。

**【0005】** このため、プログラムの進行に応じてユーザの近くの電話機又は携帯電話機が発呼され、プログラムに関係する内容の音声の流れ出て、ユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができる。請求項2に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、公衆回線に接続されており、予め格納されている音声を提供する音声サーバシステムと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、前記ユーザシステムのプログラムの実行によって与えられるヒントによりユーザが前記電話機又は携帯電話機から音声サーバシステムに回線接続し、前記音声サーバシステムから前記電話機又は携帯電話機に音声を提供する。

**【0006】** このため、ユーザシステムが公衆回線に接続されていなくても、プログラムの実行によって与えられるヒントでユーザが電話機又は携帯電話機で発呼することにより、プログラムに関係する内容の音声の流れ出てユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができる。請求項3に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、前記ユーザシステムを公衆回線に接続するアダプタと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し前記ユーザシステムのプログラムの実行によって前記記憶媒体に予め格納されている音

声を読み出して前記ユーザシステムから公衆回線を通して前記電話機又は携帯電話機に供給する。

【0007】このため、プログラムの進行に応じてユーザの近くの電話機又は携帯電話機が発呼され、プログラムに関係する内容の音声記憶媒体から読み出されて電話機又は携帯電話機から流れ、ユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができ、音声サービスシステムが不要で構成が簡単となる。請求項4に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、前記ユーザシステムの近傍にある携帯電話機と、前記ユーザシステムを前記携帯電話機と接続するアダプタとを有し、前記ユーザプログラムの実行によって前記記憶媒体に予め格納されている音声を読み出して前記ユーザシステムからアダプタを通して前記携帯電話機に供給する。

【0008】このため、プログラムの進行に応じてユーザの近くの携帯電話機が発呼され、プログラムに関係する内容の音声記憶媒体から読み出されて携帯電話機から流れ、ユーザシステムに加えて、更にユーザシステムとのコミュニケーションを図ることができ、また、公衆回線を通す必要がないため構成が簡単となり、料金もかからない。

#### 【0009】

【発明の実施の形態】図1は本発明システムの第1実施例の構成図を示す。同図中、10はゲーム機又はパーソナルコンピュータ等のユーザシステムである。このユーザシステム10はモデム12を通して公衆回線14に接続されている。また、ユーザの電話機16も公衆回線14に接続され、ユーザの携帯電話機（PHS等の簡易型携帯電話機も含む）18も基地局20を通して公衆回線14に接続される。更に公衆回線14には音声サービスシステム22が接続されている。

【0010】図2はユーザシステム10としてのパーソナルコンピュータの一実施例のブロック図を示す。同図中、CD-ROM装置30はゲームプログラム等のソフトウェア記憶されたCD-ROM32を再生する。CD-ROM32から読み出されたプログラム及びそのデータ（画像データ及び音声データ）は、バス33を通してRAM34に格納され、CPU36によってプログラムが実行される。画像処理回路38はCD-ROM32から読み出されCPU36の制御によって供給される画像データをビデオメモリ40に格納し、所定周期でビデオメモリ40から走査の順に読み出した画像データからアナログ映像信号を生成してディスプレイ42に供給し画像を表示させる。また、音声処理回路44はCD-ROM32から読み出されCPU36の制御によって供給される音声データをアナログ音声信号に変換してスピーカ46に供給し音声を出力させる。

【0011】キーボード及びマウス等の入力部48はユーザの操作による操作データを発生し、CPU36で実

行されるプログラムはこの操作データに応じてゲームの進行を制御する。なお、ROM50にはOS（オペレーティングシステム）等のプログラムが格納されている。通信インタフェース52は外部のモデム12と接続され、バス33とモデム12との間のデータ通信を行う。

【0012】なお、ユーザシステム10がゲーム機の場合は画像処理回路38、音声処理回路44夫々で生成されたアナログ映像信号、アナログ音声信号が図示しないテレビジョン受像機に供給されて表示及び発音が行われる。入力部48としてコントローラが用いられる。図3は音声サービスシステム22の一実施例のブロック図を示す。同図中、CPU60はROM62に格納された処理プログラムを実行して音声データベース64のデータ管理、入出力信号処理等を行う。音声データベース64には音声データが予め登録されており、CPU60は必要とする音声データを音声データベース64から検索して読み出し、バス66を通して音声処理回路68に供給する。音声処理回路68は音声データをアナログ音声信号に変換してモデム70に供給する。

【0013】モデム70は公衆回線14に接続されている。上記の音声処理回路68から供給されるアナログ音声信号は公衆回線14を通して電話機16、又は携帯電話機18に伝送される。また、モデム70には公衆回線14を通して例えばユーザシステム10からコマンド等の通信データが供給される。この通信データは通信インタフェース72からバス66を通してCPU60に読み込まれCPU60で解析される。なお、RAM74はCPU60の作業領域等に使用される。

【0014】図1に示すシステムのタイムチャートを図4に示す。ユーザシステム10でゲームプログラムを記憶したCD-ROM32をCD-ROM装置30で再生すると、ゲーム開始に先立つステップS10でディスプレイ42上に図5に示すような電話番号の登録要求のメッセージが表示される。これによってユーザは入力部48を用いて電話機16又は携帯電話機18の電話番号を入力し、この電話番号がRAM34に格納されて登録される。

【0015】次にステップS12でゲームが開始される。ゲームの進展によりステップS14で所定のイベントが発生する。このイベントは、例えば推理／ミステリーゲームの場合は、ユーザがゲームのキャラクターである探偵としてゲームを行っているとき犯人から電話がある場面、又は脅迫電話や密告電話がある場面等である。SFゲームや冒険ゲームの場合は、ゲームのキャラクターから無線通信がある場面等である。

【0016】上記のイベント発生によりステップS16でCPU36は音声サービスシステム22に接続するための発呼処理を行い、これによってステップS18で通信インタフェース52からモデム12を通して公衆回線14への外線発信が行われる。これによって音声サービ

ステム22が発呼され、ステップS30で音声サーバシステム22の接続処理が行われる。回線接続が終ると、ユーザシステム10はステップS14で発生したイベントに応じた音声出力要求をステップS20で音声サーバシステムに伝送する。

【0017】音声サーバシステム22はステップS32でユーザの電話に対する発呼処理を行う。ユーザの電話番号はステップS10で登録されたもので、音声出力要求のパラメータとして通知されている。上記の発呼処理によってステップS34で通信インタフェース72からモデム70を通して公衆回線14への外線発信が行われる。これによってユーザの電話機16又は携帯電話機18が発呼され、ステップS50で電話機16又は携帯電話機18の接続処理（オフフック）が行われる。

【0018】回線接続後、音声サーバシステム22はステップS36で音声出力要求に基づいて音声データベース64を検索して音声データを出力し、ステップS38でこの音声データをアナログ音声信号に変換（ボイス変換）してユーザの電話機16又は携帯電話機18に送出する。これによってステップS52でユーザの電話機16又は携帯電話機18から音声が発音される。

【0019】これによって、ユーザはゲーム中に手近かにある電話機16又は携帯電話機18で呼出され、オフフックすると、ゲームに関係した例えば犯人の声や脅迫、密告の声が流れたり、ゲームのキャラクタからの無線通信の声等が流れる。このため、ユーザを従来以上にゲームの世界に引き込むことができる。このとき、ユーザシステム10のディスプレイ42には例えば図6に示すようにゲームにおける犯人又はキャラクタ80が携帯電話機82で通話しているような画像を表示するとより効果的である。

【0020】ここで、電話機16又は携帯電話機18から流れた音声に対応してユーザはステップS54で電話のプッシュキー操作を行う。このプッシュキー操作で発生したプッシュキー音声信号は音声サーバシステム22に伝送され、音声処理回路68はステップS40でプッシュキー音声信号を周波数分析して操作されたプッシュキーのコードに変換（ボイス変換）を行ってユーザシステム10に伝送する。ユーザシステム10のCPU36は通信インタフェース52を通して供給されるプッシュキーコードを解釈してゲームプログラムに対する入力として処理を行う。このプッシュキー操作によって、例えばゲーム内でディスプレイ42に表示される画像の機器を操作することができる。つまり、オンライン接続された電話機16又は携帯電話機18を用いてユーザシステム10を操作することができる。

【0021】図7は本発明システムの第2実施例の構成図を示す。同図中、10はゲーム機又はパーソナルコンピュータ等のユーザシステムである。ユーザの電話機16は公衆回線14に接続され、ユーザの携帯電話機（P

HS等の簡易型携帯電話機も含む）18は基地局20を通して公衆回線14に接続されている。更に公衆回線14には音声サーバシステム22が接続されている。

【0022】図7に示すシステムのタイムチャートを図8に示す。ステップS112でゲームが開始される。ゲームの進展によりステップS114で所定のイベントが発生する。このイベントは、例えばゲームのキャラクタに対して電話を行う場面等である。このときディスプレイ表示画像では、例えば音声サーバシステム22の電話番号及び内線番号を書いた紙片が表示され、ユーザに対してヒントが与えられる（ステップS116）。

【0023】このヒントによってステップS150でユーザは電話機16又は携帯電話機18を手動発呼する。これによってステップS152で音声サーバシステム22に対する外線発信が行われ、音声サーバシステム22ではステップS130で接続処理を行う。そして音声サーバシステム22のCPU60はステップS132でユーザにより電話機16又は携帯電話機18から入力された内線番号を認識する。

【0024】音声サーバシステム22はステップS134で音声出力要求としての内線番号に基づいて音声データベース64を検索して音声データを出力し、ステップS136でこの音声データをアナログ音声信号に変換（ボイス変換）してユーザの電話機16又は携帯電話機18に送出する。これによってステップS52でユーザの電話機16又は携帯電話機18から音声が発音される。これによって、ユーザはゲーム中に手近かにある電話機16又は携帯電話機18でゲームに関係したゲームのキャラクタからの電話又は無線通信の声等が流れる。このため、ユーザを従来以上にゲームの世界に引き込むことができる。

【0025】図9は本発明システムの第3実施例の構成図を示す。同図中、10はゲーム機又はパーソナルコンピュータ等のユーザシステムである。このユーザシステム10はアダプタ90を通して公衆回線14に接続されている。また、ユーザの電話機16も公衆回線14に接続され、ユーザの携帯電話機（PHS等の簡易型携帯電話機も含む）18も基地局20を通して公衆回線14に接続されている。

【0026】図10はアダプタ90の一実施例のブロック図を示す。同図中、通信インタフェース92はユーザシステム10の通信インタフェース52と接続される。音声処理回路93は音声データからアナログ音声信号への変換及びその逆変換を行う。セレクタ94はモデム96とPHSオームアダプタ98のいずれか一方を選択する。この選択は通信インタフェース92を介してユーザシステム10のCPU36からの制御によって行われる。モデム96は公衆回線14に接続される。PHSホームアダプタ98は携帯電話機18がPHS方式の簡易型携帯電話である場合、この携帯電話機18を家庭内で

コードレス電話機として使用するためのアダプタであり、そのためのアンテナ99を有している。

【0027】図9に示すシステムでアダプタ90内のモデム96を使用する場合のタイムチャートを図11に示す。ユーザシステム10でゲームプログラムを記憶したCD-ROM32をCD-ROM装置30で再生すると、ゲーム開始に先立つステップS210でディスプレイ42上に電話番号の登録要求のメッセージが表示される。これによってユーザは入力部48を用いて電話機16又は携帯電話機18の電話番号を入力し、この電話番号がRAM34に格納されて登録される。

【0028】次にステップS212でゲームが開始される。ゲームの進展によりステップS214で所定のイベントが発生する。このイベントは、例えば推理／ミステリーゲームの場合は、ユーザがゲームのキャラクタである探偵としてゲームを行っているとき犯人から電話がある場面、又は脅迫電話や密告電話がある場面等である。SFゲームや冒険ゲームの場合は、ゲームのキャラクタから無線通信がある場面等である。

【0029】上記のイベント発生によりステップS216でCPU36は発呼処理を行い、これによってステップS218で通信インタフェース52からアダプタ90のモデム96を通して公衆回線14への外線発信が行われる。これによってユーザの電話機16又は携帯電話機18が発呼され、ステップS250で電話機16又は携帯電話機18の接続処理（オフフック）が行われる。

【0030】回線接続後、ユーザシステム10のCPU36はCD-ROM32から再生した音声データをステップS220で出力し、アダプタの音声処理回路93はステップS222でこの音声データをアナログ音声信号に変換（ボイス変換）してユーザの電話機16又は携帯電話機18に送出する。これによってステップS252でユーザの電話機16又は携帯電話機18から音声が発音される。

【0031】これによって、ユーザはゲーム中に手近かにある電話機16又は携帯電話機18で呼出され、オフフックすると、ゲームに関係した例えば犯人の声や脅迫、密告の声が流れたり、ゲームのキャラクタからの無線通信の声等が流れる。このため、ユーザを従来以上にゲームの世界に引き込むことができる。なお、この実施例ではCD-ROM32のソフトウェア内に電話の声として出力する音声データを予め記憶させておく必要がある。

【0032】ここで、電話機16又は携帯電話機18から流れた音声に対応してユーザはステップS254で電話のプッシュキー操作を行う。このプッシュキー操作で発生したプッシュキー音声信号はアダプタ90に伝送され、音声処理回路93はステップS224でボイス変換を行ってプッシュキーコードをユーザシステム10に伝送する。ユーザシステム10のCPU36は通信インタ

フェース52を通して供給されるプッシュキーコードを解読してゲームプログラムに対する入力として処理を行う。このプッシュキーコードによって、例えばゲーム内でディスプレイ42に表示される画像の機器を操作することができる。つまり、オンライン接続された電話機16又は携帯電話機18を用いてユーザシステム10を操作することができる。この実施例では音声サーバシステムが不要であり、システムの構成が簡単となる。

【0033】図12は本発明システムの第4実施例の構成図を示す。同図中、10はゲーム機又はパーソナルコンピュータ等のユーザシステムである。このユーザシステム10にはアダプタ90が接続されている。ユーザの携帯電話機（PHS）18は子機としてアダプタ90内のPHSホームアダプタ98と接続可能とされている。

【0034】図12に示すシステムのタイムチャートを図13に示す。ユーザシステム10でゲームプログラムを記憶したCD-ROM32をCD-ROM装置30で再生すると、ステップS312でゲームが開始される。ゲームの進展によりステップS314で所定のイベントが発生する。このイベントは、例えば推理／ミステリーゲームの場合は、ユーザがゲームのキャラクタである探偵としてゲームを行っているとき犯人から電話がある場面、又は脅迫電話や密告電話がある場面等である。SFゲームや冒険ゲームの場合は、ゲームのキャラクタから無線通信がある場面等である。

【0035】上記のイベント発生によりステップS316でCPU36は発呼処理を行い、これによってステップS318で通信インタフェース52からアダプタ90のPHSホームアダプタ98から携帯電話機18への子機呼び出しが行われる。これによってユーザの携帯電話機18が発呼され、ステップS350で携帯電話機18の接続処理（オフフック）が行われる。

【0036】回線接続後、ユーザシステム10のCPU36はCD-ROM32から再生した音声データをステップS320で出力し、アダプタの音声処理回路93はステップS322でこの音声データをアナログ音声信号に変換（ボイス変換）してユーザの携帯電話機18に送出する。これによってステップS352でユーザの携帯電話機18から音声が発音される。

【0037】これによって、ユーザはゲーム中に手近かにある携帯電話機18で呼出され、オフフックすると、ゲームに関係した例えば犯人の声や脅迫、密告の声が流れたり、ゲームのキャラクタからの無線通信の声等が流れる。このため、ユーザを従来以上にゲームの世界に引き込むことができる。なお、この実施例ではCD-ROM32のソフトウェア内に電話の声として出力する音声データを予め記憶させておく必要がある。

【0038】ここで、携帯電話機18から流れた音声に対応してユーザはステップS354で電話のプッシュキー操作を行う。このプッシュキー操作で発生したプッシュ

ューキー音声信号はアダプタ90に伝送され、音声処理回路93はステップS324でボイス変換を行ってプッシュキーコードをユーザシステム10に伝送する。ユーザシステム10のCPU36は通信インタフェース52を通して供給されるプッシュキーコードを解読してゲームプログラムに対する入力として処理を行う。このプッシュキー操作によって、例えばゲーム内でディスプレイ42に表示される画像の機器を操作することができる。つまり、オンライン接続された携帯電話機18を用いてユーザシステム10を操作することができる。

【0039】この実施例ではユーザシステムから公衆回線を通さずに携帯電話を発呼するため、構成が簡単であると共に、電話料金がかからないで済む。なお、上記実施例では記憶媒体としてCD-ROMを用いているが、この他にもROMやMO等の他の記憶媒体を用いても良いことは勿論である。

#### 【0040】

【発明の効果】上述の如く、請求項1に記載の発明は、公衆回線に接続されており、記憶媒体からプログラムを読み出して実行するユーザシステムと、公衆回線に接続

されており、予め格納されている音声を提供する音声サーバシステムと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、前記ユーザシステムのプログラムの実行により公衆回線を通して音声サーバシステムに音声出力要求を出し、前記音声サーバシステムから前記電話機又は携帯電話機に回線接続して音声を提供する。

【0041】このため、プログラムの進行に応じてユーザの近くの電話機又は携帯電話機が発呼され、プログラムに関する内容の音声の流れ出て、ユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができる。また、請求項2に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、公衆回線に接続されており、予め格納されている音声を提供する音声サーバシステムと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し、前記ユーザシステムのプログラムの実行によって与えられるヒントによりユーザが前記電話機又は携帯電話機から音声サーバシステムに回線接続し、前記音声サーバシステムから前記電話機又は携帯電話機に音声を提供する。

【0042】このため、ユーザシステムが公衆回線に接続されていなくても、プログラムの実行によって与えられるヒントでユーザが電話機又は携帯電話機で発呼することにより、プログラムに関する内容の音声の流れ出てユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができる。また、請求項3に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、前記ユーザシステムを公衆回線に接続するアダプタと、前記ユーザシステムの近傍にある電話機又は携帯電話機とを有し前記ユーザシステムのプロ

グラムの実行によって前記記憶媒体に予め格納されている音声を読み出して前記ユーザシステムから公衆回線を通して前記電話機又は携帯電話機に供給する。

【0043】このため、プログラムの進行に応じてユーザの近くの電話機又は携帯電話機が発呼され、プログラムに関する内容の音声の記憶媒体から読み出されて電話機又は携帯電話機から流れ、ユーザシステムに加えて、更にユーザとのコミュニケーションを図ることができ、音声サーバシステムが不要で構成が簡単となる。また、請求項4に記載の発明は、記憶媒体からプログラムを読み出して実行するユーザシステムと、前記ユーザシステムの近傍にある携帯電話機と、前記ユーザシステムを前記携帯電話機と接続するアダプタとを有し、前記ユーザプログラムの実行によって前記記憶媒体に予め格納されている音声を読み出して前記ユーザシステムからアダプタを通して前記携帯電話機に供給する。

【0044】このため、プログラムの進行に応じてユーザの近くの携帯電話機が発呼され、プログラムに関する内容の音声の記憶媒体から読み出されて携帯電話機から流れ、ユーザシステムに加えて、更にユーザシステムとのコミュニケーションを図ることができ、また、公衆回線を通す必要がないため構成が簡単となり、料金もかからない。

#### 【図面の簡単な説明】

【図1】本発明システムの構成図である。

【図2】ユーザシステムのブロック図である。

【図3】音声サーバシステムのブロック図である。

【図4】図1のタイムチャートである。

【図5】ディスプレイ表示例を示す図である。

【図6】ディスプレイ表示例を示す図である。

【図7】本発明システムの構成図である。

【図8】図7のタイムチャートである。

【図9】本発明システムの構成図である。

【図10】アダプタのブロック図である。

【図11】図9のタイムチャートである。

【図12】本発明システムの構成図である。

【図13】図12のタイムチャートである。

#### 【符号の説明】

- 10 ユーザシステム
- 12, 96 モデム
- 14 公衆回線
- 16 電話機
- 18 携帯電話機
- 20 基地局
- 22 音声サーバシステム
- 30 CD-ROM装置
- 32 CD-ROM
- 36, 60 CPU
- 38 画像処理装置
- 42 ディスプレイ

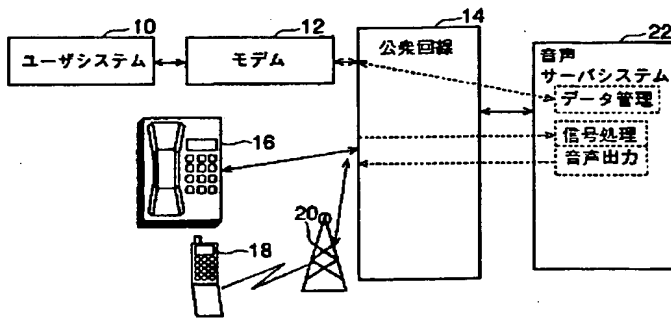
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12

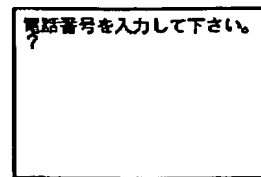
44, 68, 93 音声処理装置  
 52, 72, 92 通信インタフェース  
 90 アダプタ

94 セレクタ  
 98 PHSホームアダプタ

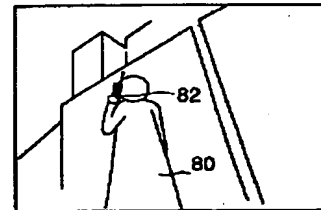
【図1】



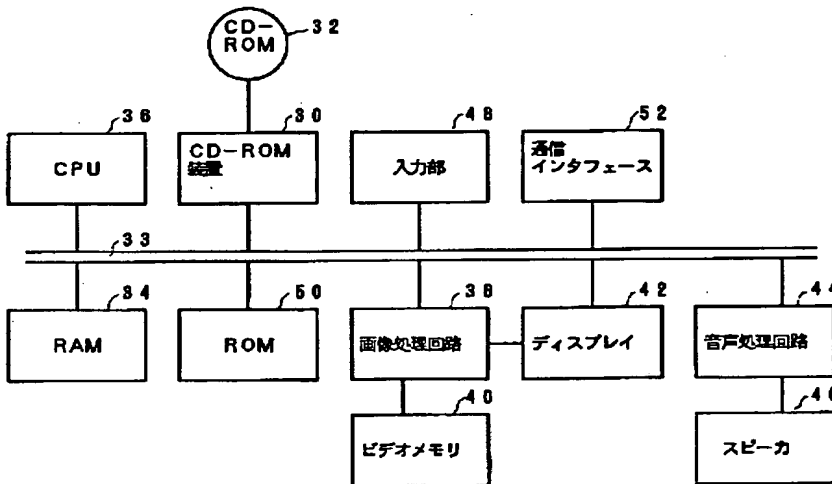
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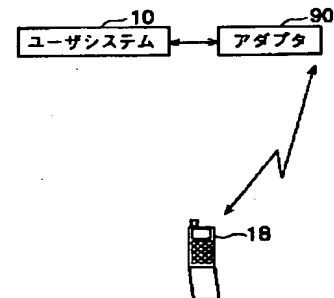
【図6】



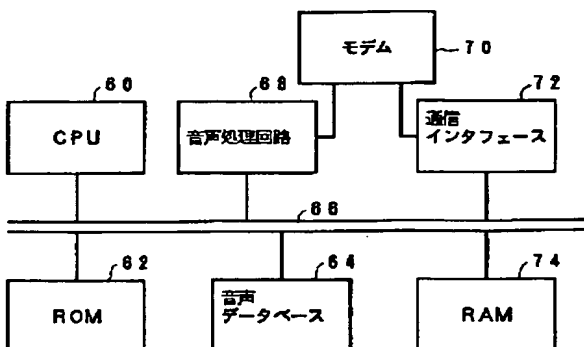
【図2】



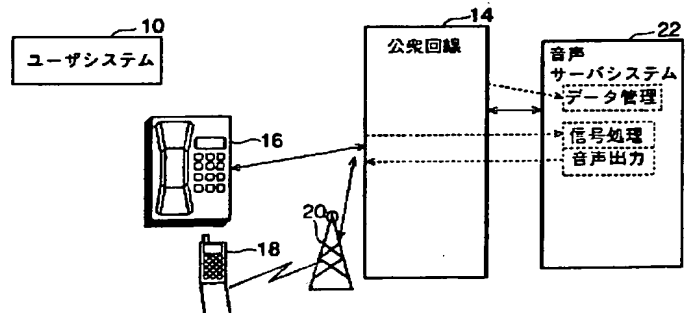
【図12】



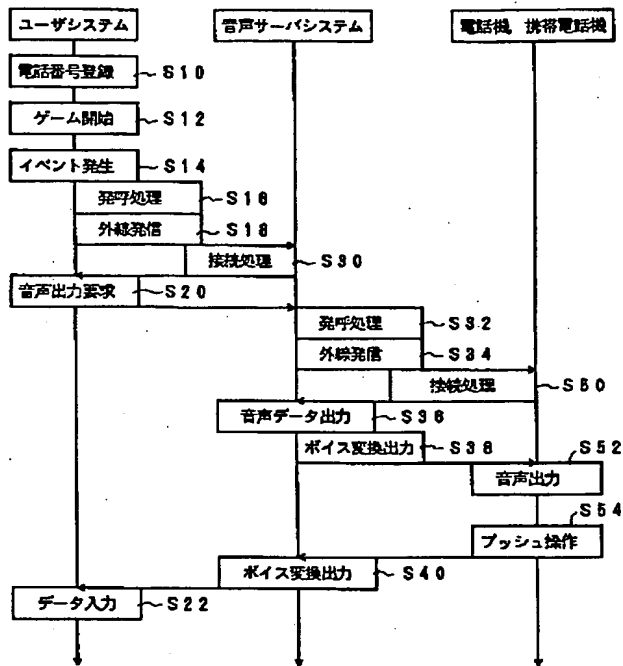
【図3】



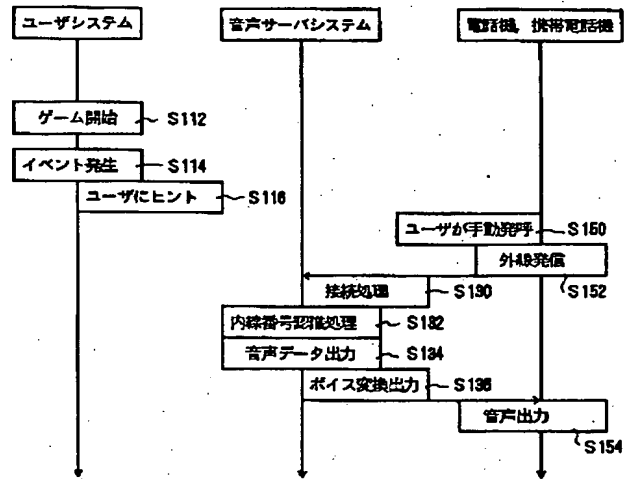
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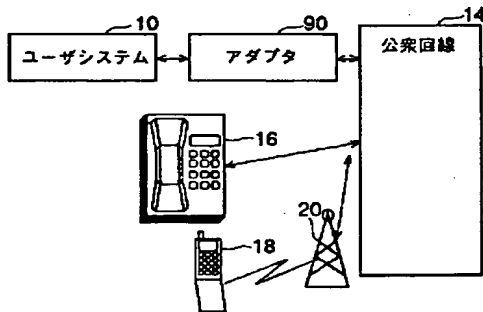
【図4】



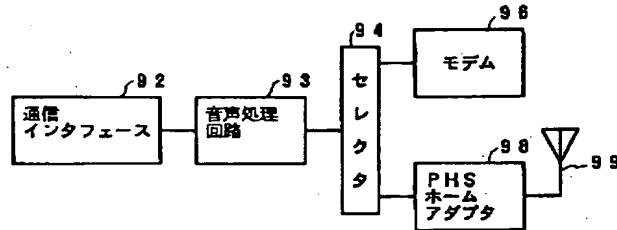
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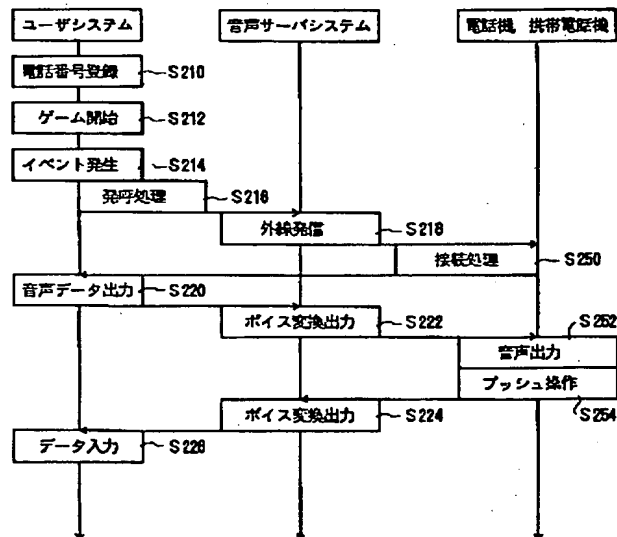
【図9】



【図10】

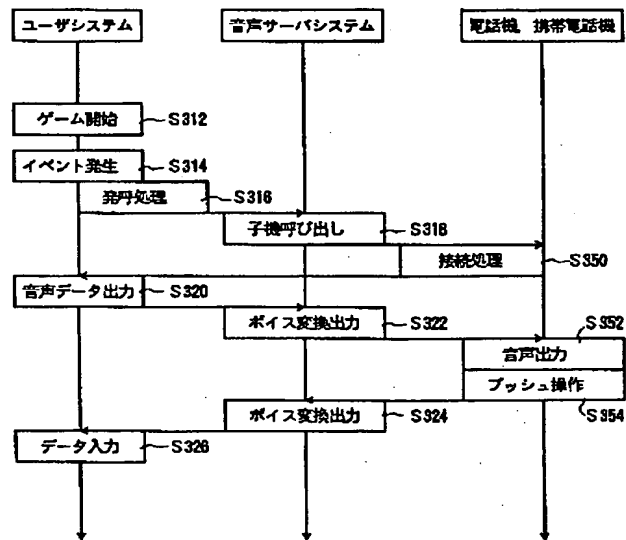


【図11】





【図13】



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(71)Applicant : EE D M:KK

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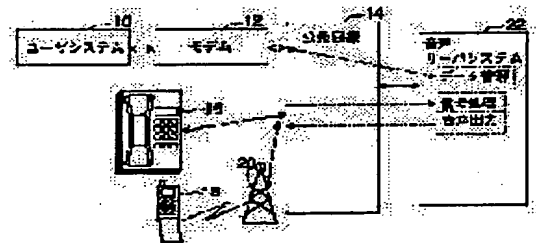
(72)Inventor : NISHINA HIROAKI

## (54) INTERACTIVE SYSTEM

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an interactive system which communicates with a user by using a telephone or a portable telephone.

**SOLUTION:** This system has a user system 10 which reads and executes a program from a storage medium, a voice server system 22 which supplies a voice that is previously stored and a telephone set 16 or a portable telephone 18 which exists near the system 10, sends a voice output request to the system 22 through a public circuit 14 by executing a program of the system 10, connects a line from the system 22 to the set 16 or the telephone 18 and supplies a voice. Thus the voice of content that is related to the program comes out from the set 16 or the telephone 18 which is near a user and is added to the system 10, and further the communication with the user is carried out.



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08.01.2002

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[Date of extinction of right]

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**CLAIMS**

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[Claim(s)]

[Claim 1] The user system which is connected to the public line, and reads and performs a program from a storage, The voice server system which supplies the voice which is connected to the public line and stored beforehand, Have the telephone or portable telephone near said user system, and a voice output demand is given to a voice server system through a public line by the program execution of said user system. The interactive system characterized by carrying out a line connection to said telephone or portable telephone from said voice server system, and supplying voice.

[Claim 2] The interactive system which it has the user system which reads and performs a program from a storage, the voice server system which supplies the voice which is connected to the public line and stored beforehand, and the telephone or the portable telephone near said user system, and a user does a line connection from said telephone or a portable telephone to a voice server system by the hint given by the program execution of said user system, and is characterized by to supply voice from said voice server system to said telephone or portable telephone.

[Claim 3] The interactive system characterized by reading the voice which has the user system which reads and performs a program from a storage, the adapter which connects said user system to a public line, and the telephone or portable telephone near said user system, and is beforehand stored in said storage by the program execution of said user system, and supplying said telephone or portable telephone through a public line from said user system.

[Claim 4] The interactive system characterized by having the user system which reads and performs a program from a storage, a portable telephone near said user system, and ATAPUTA which connects said user system with said portable telephone, reading the voice beforehand stored in said storage by activation of said user program, and supplying said portable telephone through an adapter from said user system.

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[Translation done.]

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the interactive system using communication equipments, such as a telephone, about an interactive system.

[0002]

[Description of the Prior Art] Conventionally software memorized by storages, such as CD-ROM (compact disc read only memory), is performed, image display and a voice output are performed according to a user's alter operation, and enjoying a game with a game machine or a personal computer is performed. Moreover, performing a game at two or more terminals (personal computer) of a remote place using personal computer communication service from the former is also performed.

[0003]

[Problem(s) to be Solved by the Invention] The conventional game machine is enjoyed with the image displayed on a television receiver or a display in a personal computer, and the voice which flows from a loudspeaker, and there was no thought of having connected telephone and a portable telephone to this and aiming at communication. This invention is what got used in view of the above-mentioned point, and it aims at offering the interactive system which aims at communication with a user using a telephone or a cellular phone.

[0004]

[Means for Solving the Problem] The user system which invention according to claim 1 is connected to the public line, and reads and performs a program from a storage, The voice server system which supplies the voice which is connected to the public line and stored beforehand, It has the telephone or portable telephone near said user system, a voice output demand is given to a voice server system through a public line by the program execution of said user system, a line connection is carried out to said telephone or portable telephone from said voice server system, and voice is supplied.

[0005] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user can be carried out, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Invention according to claim 2 has the user system which reads and performs a program from a storage, the voice server system which supplies the voice which is connected to the public line and stored beforehand, and the telephone or the portable telephone near said user system, and a user does a line connection from said telephone or a portable telephone to a voice server system by the hint given by the program execution of said user system, and it supplies voice from said voice server system to said telephone or portable telephone.

[0006] For this reason, even if the user system is not connected to the public line, when a user does call origination with telephone or a portable telephone with the hint given by program execution, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Invention according to claim 3 reads the voice which has the user system which reads and performs a program from a storage, the adapter which connects said user system to a public line, and the telephone or portable telephone near said user system, and is beforehand stored in said storage by the program execution of said user system, and supplies it to said telephone or portable telephone through a public line from said user system.

[0007] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user is carried out, and the voice of the contents related to a program can be read from a storage, it can flow from telephone or a portable telephone, and, in addition to a user system, communication with a user can be aimed at further, a voice server system is unnecessary and a configuration becomes easy. Invention according to claim 4 has the user system which reads and performs a program from a storage, a portable telephone near said user system, and ATAPUTA which connects said

user system with said portable telephone, reads the voice beforehand stored in said storage by activation of said user program, and supplies it to said portable telephone through an adapter from said user system. [0008] For this reason, since the voice of the contents related to a program can be read from a storage and it is not necessary for call origination of the portable telephone near the user to be carried out according to advance of a program, and to flow from a portable telephone, and to aim at communication with a user system further in addition to a user system, and to let a public line pass, a configuration becomes easy, and a tariff does not start, either.

[0009]

[Embodiment of the Invention] Drawing 1 shows the block diagram of the 1st example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. This user system 10 is connected to the public line 14 through the modem 12. Moreover, a user's telephone 16 is also connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is also connected to a public line 14 through a base station 20. Furthermore, the voice server system 22 is connected to the public line 14.

[0010] Drawing 2 shows the block diagram of one example of the personal computer as a user system 10. CD-ROM equipment 30 reproduces CD-ROMs 32 by which software storage was carried out, such as a game program, among this drawing. The program read from CD-ROM 32 and its data (image data and voice data) are stored in RAM 34 through a bus 33, and a program is performed by CPU 36. The image-processing circuit 38 stores in video memory 40 the image data which is read from CD-ROM 32 and supplied by control of CPU 36, it generates an analog video signal from the image data read from video memory 40 in order of the scan with the predetermined period, supplies it to a display 42, and displays an image. Moreover, the speech processing circuit 44 changes into an analog sound signal the voice data which is read from CD-ROM 32 and supplied by control of CPU 36, supplies it to a loudspeaker 46, and makes voice output.

[0011] The input sections 48, such as a keyboard and a mouse, generate the actuation data based on actuation of a user, and the program performed by CPU 36 controls advance of a game according to this actuation data. In addition, programs, such as OS (operating system), are stored in ROM 50. It connects with the external modem 12 and a communication interface 52 performs data communication between a bus 33 and a modem 12.

[0012] In addition, when the user system 10 is a game machine, the television receiver which the analog video signal generated by image-processing circuit 38 and speech processing circuit 44 each and an analog sound signal do not illustrate is supplied, and display and pronunciation are performed. A controller is used as the input section 48. Drawing 3 shows the block diagram of one example of the voice server system 22. Among this drawing, CPU 60 performs the processing program stored in ROM 62, and performs data control of the voice database 64, I/O signal processing, etc. Voice data is beforehand registered into the voice database 64, and CPU 60 searches and reads the voice data to need from the voice database 64, and supplies it to the speech processing circuit 68 through a bus 66. The speech processing circuit 68 changes voice data into an analog sound signal, and supplies it to a modem 70.

[0013] The modem 70 is connected to the public line 14. The analog sound signal supplied is transmitted to telephone 16 or a portable telephone 18 through a public line 14 from the above-mentioned speech processing circuit 68. Moreover, commo data, such as a command, is supplied to a modem 70 from the user system 10 through a public line 14. This commo data is read into CPU 60 from a communication interface 72 through a bus 66, and is analyzed by CPU 60. In addition, RAM 74 is used for the working area of CPU 60 etc.

[0014] The timing diagram of the system shown in drawing 1 is shown in drawing 4. If CD-ROM 32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, the message of a registration demand of the telephone number as shown on a display 42 at step S10 before game initiation at drawing 5 will be displayed. A user inputs the telephone number of telephone 16 or a portable telephone 18 using the input section 48, and this telephone number is stored in RAM 34 by this, and he is registered.

[0015] Next, a game is started at step S12. An event predetermined at step S14 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0016] Call origination processing for connecting CPU 36 to the voice server system 22 at step S16 according to the above-mentioned event generating is performed, and line wire dispatch to a public line 14 is performed by this through a modem 12 from a communication interface 52 at step S18. Call origination of the voice server system 22 is carried out by this, and connection processing of the voice server system 22 is performed at step S30. If a line connection finishes, the user system 10 will transmit the voice output

demand according to the event generated at step S14 to a voice server system at step S20.

[0017] The voice server system 22 performs call origination processing to a user's telephone at step S32. A user's telephone number was registered at step S10, and is notified as a parameter of a voice output demand. Line wire dispatch to a public line 14 is performed by the above-mentioned call origination processing through a modem 70 from a communication interface 72 at step S34. Call origination of a user's telephone 16 or portable telephone 18 is carried out by this, and connection processing (off-hook) of telephone 16 or a portable telephone 18 is performed at step S50.

[0018] After a line connection, the voice server system 22 searches the voice database 64 with step S36 based on a voice output demand, outputs voice data, changes this voice data into an analog sound signal at step S38 (voice conversion), and sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S52.

[0019] By this, it is called with the telephone 16 or portable telephone 18 in whether a user is familiar in a game, and off-hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. At this time, if an image to which the criminal or character 80 in a game is telephoning with the portable telephone 82 is displayed on the display 42 of the user system 10 as shown in drawing 6, it is more effective.

[0020] Here, corresponding to the voice which flowed from telephone 16 or a portable telephone 18, a user performs push key actuation of a telephone at step S54. The push key sound signal generated in this push key actuation is transmitted to the voice server system 22, and the speech processing circuit 68 changes into the code of the push key operated by carrying out the frequency analysis of the push key sound signal at step S40 (voice conversion), and is transmitted to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push key actuation, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the telephone 16 or portable telephone 18 by which online connection was made.

[0021] Drawing 7 shows the block diagram of the 2nd example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. A user's telephone 16 is connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is connected to the public line 14 through the base station 20. Furthermore, the voice server system 22 is connected to the public line 14.

[0022] The timing diagram of the system shown in drawing 7 is shown in drawing 8. A game is started at step S112. An in vent predetermined at step S114 occurs by progress of a game. This event is a scene which telephones to the character of a game. At this time, with a display display image, the piece of paper which wrote the telephone number and the extension number of the voice server system 22, for example is displayed, and a hint is given to a user (step S116).

[0023] A user does manual call origination of telephone 16 or the portable telephone 18 at step S150 by this hint. Line wire dispatch to the voice server system 22 is performed by this at step S152, and connection processing is performed at step S130 with the voice server system 22 by it. And CPU60 of the voice server system 22 recognizes the extension number inputted by the user from telephone 16 or a portable telephone 18 at step S132.

[0024] The voice server system 22 searches the voice database 64 with step S134 based on the extension number as a voice output demand, outputs voice data, changes this voice data into an analog sound signal at step S136 (voice conversion), and sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S52. By this, the voice of the telephone from the character of the game related to a game or radio etc. flows with the telephone 16 or portable telephone 18 in whether a user is familiar in a game. For this reason, a user can be won over to the world of a game more than before.

[0025] Drawing 9 shows the block diagram of the 3rd example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. This user system 10 is connected to the public line 14 through the adapter 90. Moreover, a user's telephone 16 is also connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is also connected to the public line 14 through the base station 20.

[0026] Drawing 10 shows the block diagram of one example of an adapter 90. A communication interface 92 is connected with the communication interface 52 of the user system 10 among this drawing. The speech processing circuit 93 performs conversion to an analog sound signal from voice data, and its inverse transformation. A selector 94 chooses a modem 96 or the PHS ohm adapter 98. This selection is performed through a communication interface 92 by the control from CPU36 of the user system 10. A modem 96 is connected to a public line 14. When a portable telephone 18 is the personal handy phone of a

PHS method, the PHS home adapter 98 is an adapter for using this portable telephone 18 as a cordless telephone machine by domestic, and has the antenna 99 for it.

[0027] The timing diagram in the case of using the modem 96 in an adapter 90 by the system shown in drawing 9 is shown in drawing 11 . If CD-ROM32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, the message of a registration demand of the telephone number will be expressed as step S210 before game initiation on a display 42. A user inputs the telephone number of telephone 16 or a portable telephone 18 using the input section 48, and this telephone number is stored in RAM34 by this, and he is registered.

[0028] Next, a game is started at step S212. An in vent predetermined at step S214 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0029] CPU36 performs call origination processing at step S216 according to the above-mentioned event generating, and line wire dispatch to a public line 14 is performed by this through the modem 96 of an adapter 90 from a communication interface 52 at step S218. Call origination of a user's telephone 16 or portable telephone 18 is carried out by this, and connection processing (off-hook) of telephone 16 or a portable telephone 18 is performed at step S250.

[0030] After a line connection, CPU36 of the user system 10 outputs the voice data reproduced from CD-ROM32 at step S220, and the speech processing circuit 93 of an adapter changes this voice data into an analog sound signal at step S222 (voice conversion), and it sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S252.

[0031] By this, it is called with the telephone 16 or portable telephone 18 in whether a user is familiar in a game, and off-hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. In addition, it is necessary to make the voice data outputted as voice of a telephone in the software of CD-ROM32 memorize beforehand in this example.

[0032] Here, corresponding to the voice which flowed from telephone 16 or a portable telephone 18, a user performs push key actuation of a telephone at step S254. The push key sound signal generated in this push key actuation is transmitted to an adapter 90, and the speech processing circuit 93 performs voice conversion at step S224, and transmits a push keycode to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push keycode, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the telephone 16 or portable telephone 18 by which online connection was made. In this example, a voice server system is unnecessary and the structure of a system becomes easy.

[0033] Drawing 12 shows the block diagram of the 4th example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. The adapter 90 is connected to this user system 10. The PHS home adapter 98 in an adapter 90 and connection of a user's portable telephone (PHS) 18 are enabled as a cordless handset.

[0034] The timing diagram of the system shown in drawing 12 is shown in drawing 13 . If CD-ROM32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, a game will be started at step S312. An in vent predetermined at step S314 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0035] the above-mentioned event generating — step S316 — CPU36 — call origination processing — carrying out — this — step S318 — the cordless handset from the PHS home adapter 98 of an adapter 90 to [ from a communication interface 52 ] a portable telephone 18 — a call is performed. Call origination of a user's portable telephone 18 is carried out by this, and connection processing (off-hook) of a portable telephone 18 is performed at step S350.

[0036] After a line connection, CPU36 of the user system 10 outputs the voice data reproduced from CD-ROM32 at step S320, and the speech processing circuit 93 of an adapter changes this voice data into an analog sound signal at step S322 (voice conversion), and it sends it out to a user's portable telephone 18. Voice is pronounced by this from a user's portable telephone 18 at step S352.

[0037] By this, it is called with the portable telephone 18 in whether a user is familiar in a game, and off-

hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. In addition, it is necessary to make the voice data outputted as voice of a telephone in the software of CD-ROM32 memorize beforehand in this example.

[0038] Here, corresponding to the voice which flowed from the portable telephone 18, a user performs push key actuation of a telephone at step S354. The push key sound signal generated in this push key actuation is transmitted to an adapter 90, and the speech processing circuit 93 performs voice conversion at step S324, and transmits a push keycode to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push key actuation, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the portable telephone 18 by which online connection was made.

[0039] In this example, in order to carry out call origination of the cellular phone, without letting a public line pass from a user system, while a configuration is easy, a telephone rate does not need to be built. In addition, although CD-ROM is used as a storage in the above-mentioned example, of course, other storages, such as ROM and MO, may be used.

[0040]

[Effect of the Invention] The user system which invention according to claim 1 is connected to the public line, and reads and performs a program from a storage like \*\*\*\*, The voice server system which supplies the voice which is connected to the public line and stored beforehand, It has the telephone or portable telephone near said user system, a voice output demand is given to a voice server system through a public line by the program execution of said user system, a line connection is carried out to said telephone or portable telephone from said voice server system, and voice is supplied.

[0041] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user can be carried out, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Moreover, the user system which invention according to claim 2 reads a storage to a program, and is performed, The voice server system which supplies the voice which is connected to the public line and stored beforehand, Have the telephone or portable telephone near said user system, and a user does a line connection to a voice server system from said telephone or a portable telephone by the hint given by the program execution of said user system. Voice is supplied to said telephone or portable telephone from said voice server system.

[0042] For this reason, even if the user system is not connected to the public line, when a user does call origination with telephone or a portable telephone with the hint given by program execution, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Moreover, invention according to claim 3 reads the voice which has the user system which reads and performs a program from a storage, the adapter which connects said user system to a public line, and the telephone or portable telephone near said user system, and is beforehand stored in said storage by the program execution of said user system, and supplies it to said telephone or portable telephone through a public line from said user system.

[0043] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user is carried out, and the voice of the contents related to a program can be read from a storage, it can flow from telephone or a portable telephone, and, in addition to a user system, communication with a user can be aimed at further, a voice server system is unnecessary and a configuration becomes easy. Moreover, invention according to claim 4 has the user system which reads and performs a program from a storage, a portable telephone near said user system, and ATAPUTA which connects said user system with said portable telephone, reads the voice beforehand stored in said storage by activation of said user program, and supplies it to said portable telephone through an adapter from said user system.

[0044] For this reason, since the voice of the contents related to a program can be read from a storage and it is not necessary for call origination of the portable telephone near the user to be carried out according to advance of a program, and to flow from a portable telephone, and to aim at communication with a user system further in addition to a user system, and to let a public line pass, a configuration becomes easy, and a tariff does not start, either.



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**TECHNICAL FIELD**

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[Field of the Invention] This invention relates to the interactive system using communication equipments, such as a telephone, about an interactive system.

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PRIOR ART

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[Description of the Prior Art] Conventionally software memorized by storages, such as CD-ROM (compact disc read only memory), is performed, image display and a voice output are performed according to a user's alter operation, and enjoying a game with a game machine or a personal computer is performed. Moreover, performing a game at two or more terminals (personal computer) of a remote place using personal computer communication service from the former is also performed.

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**EFFECT OF THE INVENTION**

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[Effect of the Invention] The user system which invention according to claim 1 is connected to the public line, and reads and performs a program from a storage like \*\*\*\*, The voice server system which supplies the voice which is connected to the public line and stored beforehand, It has the telephone or portable telephone near said user system, a voice output demand is given to a voice server system through a public line by the program execution of said user system, a line connection is carried out to said telephone or portable telephone from said voice server system, and voice is supplied.

[0041] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user can be carried out, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Moreover, the user system which invention according to claim 2 reads a storage to a program, and is performed, The voice server system which supplies the voice which is connected to the public line and stored beforehand, Have the telephone or portable telephone near said user system, and a user does a line connection to a voice server system from said telephone or a portable telephone by the hint given by the program execution of said user system. Voice is supplied to said telephone or portable telephone from said voice server system.

[0042] For this reason, even if the user system is not connected to the public line, when a user does call origination with telephone or a portable telephone with the hint given by program execution, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Moreover, invention according to claim 3 reads the voice which has the user system which reads and performs a program from a storage, the adapter which connects said user system to a public line, and the telephone or portable telephone near said user system, and is beforehand stored in said storage by the program execution of said user system, and supplies it to said telephone or portable telephone through a public line from said user system.

[0043] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user is carried out, and the voice of the contents related to a program can be read from a storage, it can flow from telephone or a portable telephone, and, in addition to a user system, communication with a user can be aimed at further, a voice server system is unnecessary and a configuration becomes easy. Moreover, invention according to claim 4 has the user system which reads and performs a program from a storage, a portable telephone near said user system, and ATAPUTA which connects said user system with said portable telephone, reads the voice beforehand stored in said storage by activation of said user program, and supplies it to said portable telephone through an adapter from said user system.

[0044] For this reason, since the voice of the contents related to a program can be read from a storage and it is not necessary for call origination of the portable telephone near the user to be carried out according to advance of a program, and to flow from a portable telephone, and to aim at communication with a user system further in addition to a user system, and to let a public line pass, a configuration becomes easy, and a tariff does not start, either.

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**TECHNICAL PROBLEM**

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[Problem(s) to be Solved by the Invention] The conventional game machine is enjoyed with the image displayed on a television receiver or a display in a personal computer, and the voice which flows from a loudspeaker, and there was no thought of having connected telephone and a portable telephone to this and aiming at communication. This invention is what got used in view of the above-mentioned point, and it aims at offering the interactive system which aims at communication with a user using a telephone or a cellular phone.

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## MEANS

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[Means for Solving the Problem] The user system which invention according to claim 1 is connected to the public line, and reads and performs a program from a storage, The voice server system which supplies the voice which is connected to the public line and stored beforehand, It has the telephone or portable telephone near said user system, a voice output demand is given to a voice server system through a public line by the program execution of said user system, a line connection is carried out to said telephone or portable telephone from said voice server system, and voice is supplied.

[0005] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user can be carried out, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Invention according to claim 2 has the user system which reads and performs a program from a storage, the voice server system which supplies the voice which is connected to the public line and stored beforehand, and the telephone or the portable telephone near said user system, and a user does a line connection from said telephone or a portable telephone to a voice server system by the hint given by the program execution of said user system, and it supplies voice from said voice server system to said telephone or portable telephone.

[0006] For this reason, even if the user system is not connected to the public line, when a user does call origination with telephone or a portable telephone with the hint given by program execution, the voice of the contents related to a program can flow out, and, in addition to a user system, communication with a user can be aimed at further. Invention according to claim 3 reads the voice which has the user system which reads and performs a program from a storage, the adapter which connects said user system to a public line, and the telephone or portable telephone near said user system, and is beforehand stored in said storage by the program execution of said user system, and supplies it to said telephone or portable telephone through a public line from said user system.

[0007] For this reason, according to advance of a program, call origination of the telephone or portable telephone near the user is carried out, and the voice of the contents related to a program can be read from a storage, it can flow from telephone or a portable telephone, and, in addition to a user system, communication with a user can be aimed at further, a voice server system is unnecessary and a configuration becomes easy. Invention according to claim 4 has the user system which reads and performs a program from a storage, a portable telephone near said user system, and ATAPUTA which connects said user system with said portable telephone, reads the voice beforehand stored in said storage by activation of said user program, and supplies it to said portable telephone through an adapter from said user system.

[0008] For this reason, since the voice of the contents related to a program can be read from a storage and it is not necessary for call origination of the portable telephone near the user to be carried out according to advance of a program, and to flow from a portable telephone, and to aim at communication with a user system further in addition to a user system, and to let a public line pass, a configuration becomes easy, and a tariff does not start, either.

[0009]

[Embodiment of the Invention] Drawing 1 shows the block diagram of the 1st example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. This user system 10 is connected to the public line 14 through the modem 12. Moreover, a user's telephone 16 is also connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is also connected to a public line 14 through a base station 20. Furthermore, the voice server system 22 is connected to the public line 14.

[0010] Drawing 2 shows the block diagram of one example of the personal computer as a user system 10. CD-ROM equipment 30 reproduces CD-ROMs 32 by which software storage was carried out, such as a game program, among this drawing. The program read from CD-ROM 32 and its data (image data and voice data) are stored in RAM 34 through a bus 33, and a program is performed by CPU 36. The image-processing

circuit 38 stores in video memory 40 the image data which is read from CD-ROM32 and supplied by control of CPU36, it generates an analog video signal from the image data read from video memory 40 in order of the scan with the predetermined period, supplies it to a display 42, and displays an image. Moreover, the speech processing circuit 44 changes into an analog sound signal the voice data which is read from CD-ROM32 and supplied by control of CPU36, supplies it to a loudspeaker 46, and makes voice output.

[0011] The input sections 48, such as a keyboard and a mouse, generate the actuation data based on actuation of a user, and the program performed by CPU36 controls advance of a game according to this actuation data. In addition, programs, such as OS (operating system), are stored in ROM50. It connects with the external modem 12 and a communication interface 52 performs data communication between a bus 33 and a modem 12.

[0012] In addition, when the user system 10 is a game machine, the television receiver which the analog video signal generated by image-processing circuit 38 and speech processing circuit 44 each and an analog sound signal do not illustrate is supplied, and display and pronunciation are performed. A controller is used as the input section 48. Drawing 3 shows the block diagram of one example of the voice server system 22. Among this drawing, CPU60 performs the processing program stored in ROM62, and performs data control of the voice database 64, I/O signal processing, etc. Voice data is beforehand registered into the voice database 64, and CPU60 searches and reads the voice data to need from the voice database 64, and supplies it to the speech processing circuit 68 through a bus 66. The speech processing circuit 68 changes voice data into an analog sound signal, and supplies it to a modem 70.

[0013] The modem 70 is connected to the public line 14. The analog sound signal supplied is transmitted to telephone 16 or a portable telephone 18 through a public line 14 from the above-mentioned speech processing circuit 68. Moreover, commo data, such as a command, is supplied to a modem 70 from the user system 10 through a public line 14. This commo data is read into CPU60 from a communication interface 72 through a bus 66, and is analyzed by CPU60. In addition, RAM74 is used for the working area of CPU60 etc.

[0014] The timing diagram of the system shown in drawing 1 is shown in drawing 4. If CD-ROM32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, the message of a registration demand of the telephone number as shown on a display 42 at step S10 before game initiation at drawing 5 will be displayed. A user inputs the telephone number of telephone 16 or a portable telephone 18 using the input section 48, and this telephone number is stored in RAM34 by this, and he is registered.

[0015] Next, a game is started at step S12. An in vent predetermined at step S14 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0016] Call origination processing for connecting CPU36 to the voice server system 22 at step S16 according to the above-mentioned event generating is performed, and line wire dispatch to a public line 14 is performed by this through a modem 12 from a communication interface 52 at step S18. Call origination of the voice server system 22 is carried out by this, and connection processing of the voice server system 22 is performed at step S30. If a line connection finishes, the user system 10 will transmit the voice output demand according to the event generated at step S14 to a voice server system at step S20.

[0017] The voice server system 22 performs call origination processing to a user's telephone at step S32. A user's telephone number was registered at step S10, and is notified as a parameter of a voice output demand. Line wire dispatch to a public line 14 is performed by the above-mentioned call origination processing through a modem 70 from a communication interface 72 at step S34. Call origination of a user's telephone 16 or portable telephone 18 is carried out by this, and connection processing (off-hook) of telephone 16 or a portable telephone 18 is performed at step S50.

[0018] After a line connection, the voice server system 22 searches the voice database 64 with step S36 based on a voice output demand, outputs voice data, changes this voice data into an analog sound signal at step S38 (voice conversion), and sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S52.

[0019] By this, it is called with the telephone 16 or portable telephone 18 in whether a user is familiar in a game, and off-hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. At this time, if an image to which the criminal or character 80 in a game is telephoning with the portable telephone 82 is displayed on the display 42 of the user system 10 as shown in drawing 6, it is more effective.

[0020] Here, corresponding to the voice which flowed from telephone 16 or a portable telephone 18, a user

performs push key actuation of a telephone at step S54. The push key sound signal generated in this push key actuation is transmitted to the voice server system 22, and the speech processing circuit 68 changes into the code of the push key operated by carrying out the frequency analysis of the push key sound signal at step S40 (voice conversion), and is transmitted to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push key actuation, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the telephone 16 or portable telephone 18 by which online connection was made.

[0021] Drawing 7 shows the block diagram of the 2nd example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. A user's telephone 16 is connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is connected to the public line 14 through the base station 20. Furthermore, the voice server system 22 is connected to the public line 14.

[0022] The timing diagram of the system shown in drawing 7 is shown in drawing 8. A game is started at step S112. An in vent predetermined at step S114 occurs by progress of a game. This event is a scene which telephones to the character of a game. At this time, with a display display image, the piece of paper which wrote the telephone number and the extension number of the voice server system 22, for example is displayed, and a hint is given to a user (step S116).

[0023] A user does manual call origination of telephone 16 or the portable telephone 18 at step S150 by this hint. Line wire dispatch to the voice server system 22 is performed by this at step S152, and connection processing is performed at step S130 with the voice server system 22 by it. And CPU60 of the voice server system 22 recognizes the extension number inputted by the user from telephone 16 or a portable telephone 18 at step S132.

[0024] The voice server system 22 searches the voice database 64 with step S134 based on the extension number as a voice output demand, outputs voice data, changes this voice data into an analog sound signal at step S136 (voice conversion), and sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S52. By this, the voice of the telephone from the character of the game related to a game or radio etc. flows with the telephone 16 or portable telephone 18 in whether a user is familiar in a game. For this reason, a user can be won over to the world of a game more than before.

[0025] Drawing 9 shows the block diagram of the 3rd example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. This user system 10 is connected to the public line 14 through the adapter 90. Moreover, a user's telephone 16 is also connected to a public line 14, and a user's portable telephone (personal handy phone machines, such as PHS, are also included) 18 is also connected to the public line 14 through the base station 20.

[0026] Drawing 10 shows the block diagram of one example of an adapter 90. A communication interface 92 is connected with the communication interface 52 of the user system 10 among this drawing. The speech processing circuit 93 performs conversion to an analog sound signal from voice data, and its inverse transformation. A selector 94 chooses a modem 96 or the PHS ohm adapter 98. This selection is performed through a communication interface 92 by the control from CPU36 of the user system 10. A modem 96 is connected to a public line 14. When a portable telephone 18 is the personal handy phone of a PHS method, the PHS home adapter 98 is an adapter for using this portable telephone 18 as a cordless telephone machine by domestic, and has the antenna 99 for it.

[0027] The timing diagram in the case of using the modem 96 in an adapter 90 by the system shown in drawing 9 is shown in drawing 11. If CD-ROM32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, the message of a registration demand of the telephone number will be expressed as step S210 before game initiation on a display 42. A user inputs the telephone number of telephone 16 or a portable telephone 18 using the input section 48, and this telephone number is stored in RAM34 by this, and he is registered.

[0028] Next, a game is started at step S212. An in vent predetermined at step S214 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0029] CPU36 performs call origination processing at step S216 according to the above-mentioned event generating, and line wire dispatch to a public line 14 is performed by this through the modem 96 of an adapter 90 from a communication interface 52 at step S218. Call origination of a user's telephone 16 or portable telephone 18 is carried out by this, and connection processing (off-hook) of telephone 16 or a portable telephone 18 is performed at step S250.

[0030] After a line connection, CPU36 of the user system 10 outputs the voice data reproduced from CD-ROM32 at step S220, and the speech processing circuit 93 of an adapter changes this voice data into an analog sound signal at step S222 (voice conversion), and it sends it out to a user's telephone 16 or portable telephone 18. Voice is pronounced by this from a user's telephone 16 or portable telephone 18 at step S252.

[0031] By this, it is called with the telephone 16 or portable telephone 18 in whether a user is familiar in a game, and off-hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. In addition, it is necessary to make the voice data outputted as voice of a telephone in the software of CD-ROM32 memorize beforehand in this example.

[0032] Here, corresponding to the voice which flowed from telephone 16 or a portable telephone 18, a user performs push key actuation of a telephone at step S254. The push key sound signal generated in this push key actuation is transmitted to an adapter 90, and the speech processing circuit 93 performs voice conversion at step S224, and transmits a push keycode to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push keycode, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the telephone 16 or portable telephone 18 by which online connection was made. In this example, a voice server system is unnecessary and the structure of a system becomes easy.

[0033] Drawing 12 shows the block diagram of the 4th example of this invention system. Ten are user systems, such as a game machine or a personal computer, among this drawing. The adapter 90 is connected to this user system 10. The PHS home adapter 98 in an adapter 90 and connection of a user's portable telephone (PHS) 18 are enabled as a cordless handset.

[0034] The timing diagram of the system shown in drawing 12 is shown in drawing 13. If CD-ROM32 which memorized the game program by the user system 10 is reproduced with CD-ROM equipment 30, a game will be started at step S312. An in vent predetermined at step S314 occurs by progress of a game. In the case of for example, inference / mystery game, this event is the scene which has a telephone from a criminal, or a scene with a threatening telephone call or a secret information telephone, while the user is performing the game as a detective which is the character of a game. In the case of SF game or an adventure game, it is the scene which has radio from the character of a game.

[0035] the above-mentioned event generating — step S316 — CPU36 — call origination processing — carrying out — this — step S318 — the cordless handset from the PHS home adapter 98 of an adapter 90 to [ from a communication interface 52 ] a portable telephone 18 — a call is performed. Call origination of a user's portable telephone 18 is carried out by this, and connection processing (off-hook) of a portable telephone 18 is performed at step S350.

[0036] After a line connection, CPU36 of the user system 10 outputs the voice data reproduced from CD-ROM32 at step S320, and the speech processing circuit 93 of an adapter changes this voice data into an analog sound signal at step S322 (voice conversion), and it sends it out to a user's portable telephone 18. Voice is pronounced by this from a user's portable telephone 18 at step S352.

[0037] By this, it is called with the portable telephone 18 in whether a user is familiar in a game, and off-hook then the voice of the criminal related to a game, and the voice of a threat and secret information flow, or the voice of the radio from the character of a game etc. flows. For this reason, a user can be won over to the world of a game more than before. In addition, it is necessary to make the voice data outputted as voice of a telephone in the software of CD-ROM32 memorize beforehand in this example.

[0038] Here, corresponding to the voice which flowed from the portable telephone 18, a user performs push key actuation of a telephone at step S354. The push key sound signal generated in this push key actuation is transmitted to an adapter 90, and the speech processing circuit 93 performs voice conversion at step S324, and transmits a push keycode to the user system 10. CPU36 of the user system 10 decodes the push keycode supplied through a communication interface 52, and processes as an input to a game program. By this push key actuation, the device of the image displayed on a display 42 for example, within a game can be operated. That is, the user system 10 can be operated using the portable telephone 18 by which online connection was made.

[0039] In this example, in order to carry out call origination of the cellular phone, without letting a public line pass from a user system, while a configuration is easy, a telephone rate does not need to be built. In addition, although CD-ROM is used as a storage in the above-mentioned example, of course, other storages, such as ROM and MO, may be used.



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**DESCRIPTION OF DRAWINGS**

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[Brief Description of the Drawings]

[Drawing 1] It is this invention structure-of-a-system Fig.

[Drawing 2] It is the block diagram of a user system.

[Drawing 3] It is the block diagram of a voice server system.

[Drawing 4] It is the timing diagram of drawing 1 .

[Drawing 5] It is drawing showing the example of a display display.

[Drawing 6] It is drawing showing the example of a display display.

[Drawing 7] It is this invention structure-of-a-system Fig.

[Drawing 8] It is the timing diagram of drawing 7 .

[Drawing 9] It is this invention structure-of-a-system Fig.

[Drawing 10] It is the block diagram of an adapter.

[Drawing 11] It is the timing diagram of drawing 9 .

[Drawing 12] It is this invention structure-of-a-system Fig.

[Drawing 13] It is the timing diagram of drawing 12 .

[Description of Notations]

10 User System

12 96 Modem

14 Public Line

16 Telephone

18 Portable Telephone

20 Base Station

22 Voice Server System

30 CD-ROM Equipment

32 CD-ROM

36,60 CPU

38 Image Processing System

42 Display

44, 68, 93 Speech processing unit

52, 72, 92 Communication interface

90 Adapter

94 Selector

98 PHS Home Adapter

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[Translation done.]

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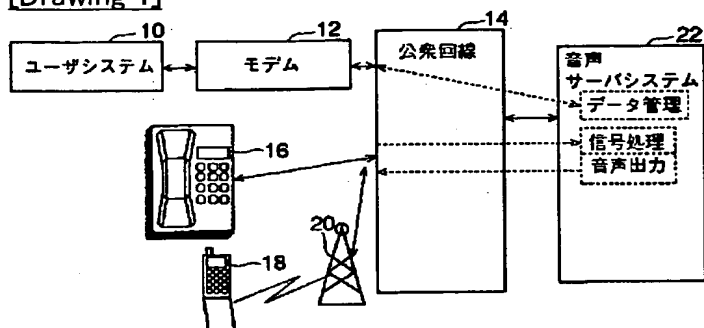
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2.\*\*\*\* shows the word which can not be translated.

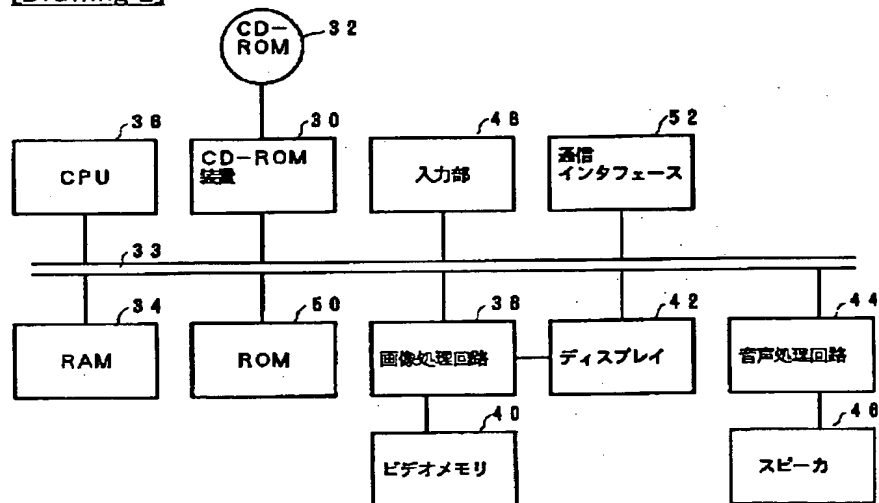
3.In the drawings, any words are not translated.

DRAWINGS

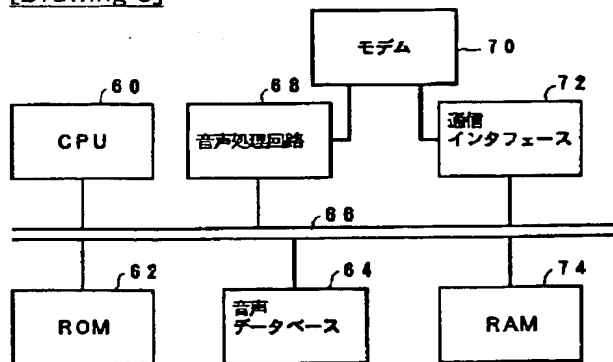
[Drawing 1]



[Drawing 2]



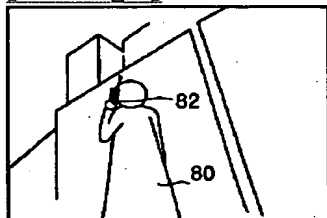
[Drawing 3]



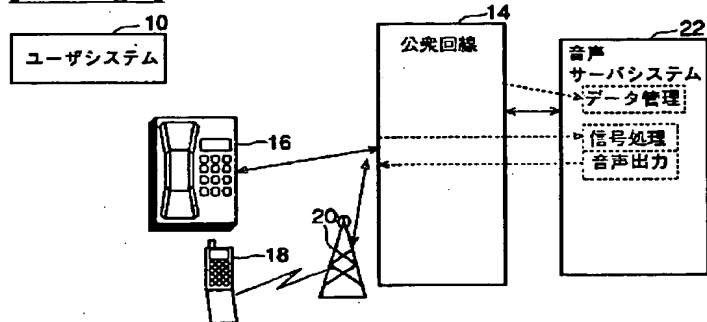
[Drawing 5]

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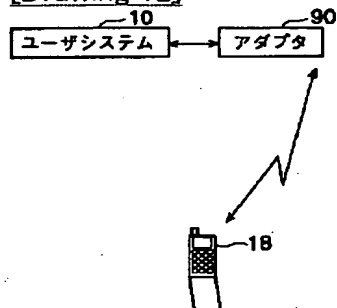
[Drawing 6]



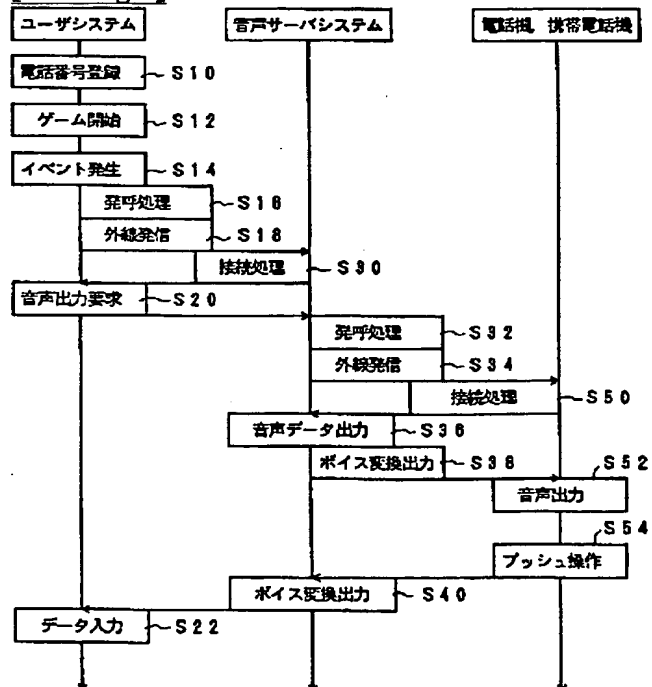
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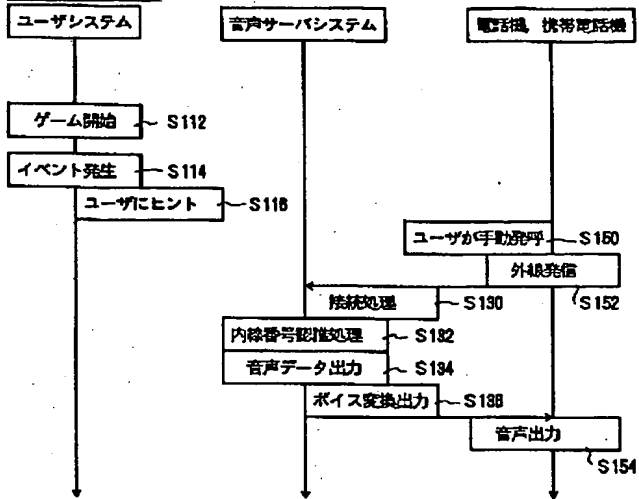
[Drawing 12]



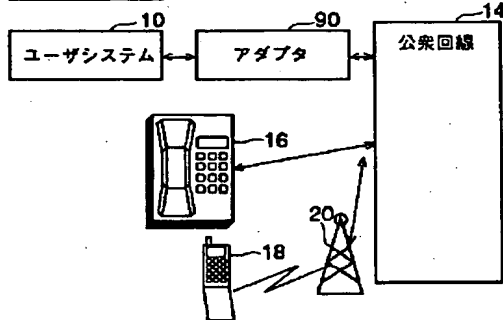
[Drawing 4]



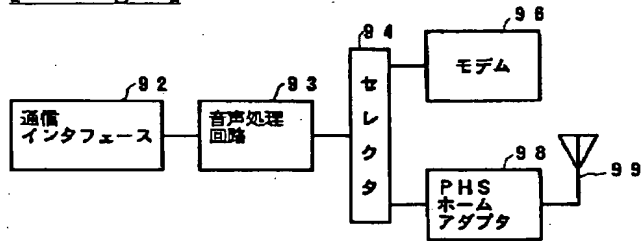
[Drawing 8]



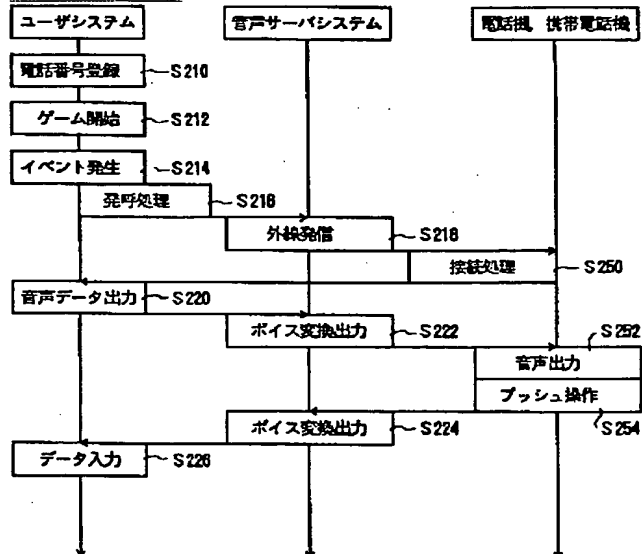
[Drawing 9]



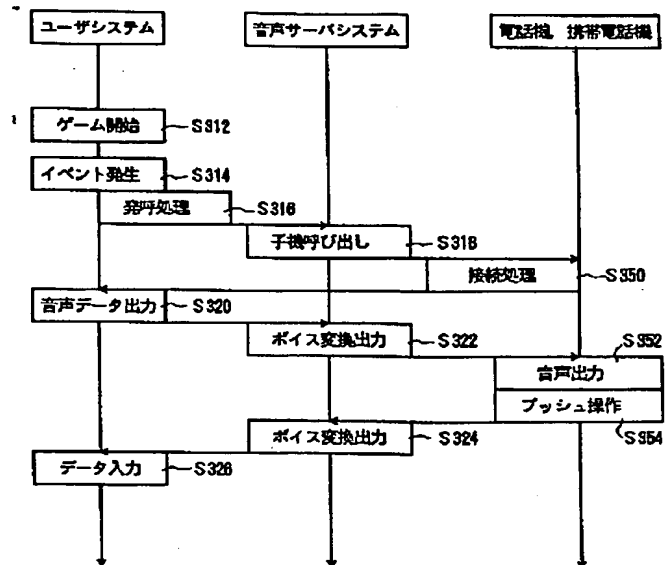
[Drawing 10]



[Drawing 11]



[Drawing 13]



[Translation done.]